Mary A. Gade, Director 217/785-8604

February 4, 1993

2200 Churchill Road, Springfield, IL 62794-9276

RECEIVED MAR 5 RECORD CENTER PARE A WMD RCRA

Southern Illinois University - Edwardsville Attn: David McDonald Science Building

Edwardsville, IL 62026

US EPA RECORDS CENTER REGION 5

1190255002 -- Madison County Refer to:

Southern Illinois University Science Bldg.

Closure Plan Approved: April 20, 1992

Closure Log #: C-619

Part A #: 148 ILD006331342 RCRA CLOSURE

Dear Mr. McDonald:

The subject hazardous waste management facility was inspected by a representative of this Agency on January 22, 1993. The inspection revealed that the closure activity was completed in accordance with the approved closure plan dated April 20, 1992.

Certification that the Hazardous Waste Container Storage Area (S01) and the Hazardous Waste Treatment Unit (T04) have been closed in accordance with the approved closure plan by the owner/operator, Southern Illinois University - Edwardsville, and an independent registered professional engineer, Randall L. Patchett P.E., of Illinois was received at this Agency December 16, 1992.

The Agency has determined that the closure of the Hazardous Waste Container Storage Area (S01) and the Hazardous Waste Treatment Unit (T04) has apparently met the requirements of Interim Status Standards, 35 Ill. Admin. Code, Part 725 (40 CFR, Part 265). Please note, the Agency has withdrawn your Part A permit application.

This facility must continue to meet requirements of 35 Ill. Adm. Code Parts 722 and 728.

If you have any questions, please contact Chris Cahnovsky at 618/346-5120.

Sincerely,

Glenn D. Savage, Manager

Field Operations Section
Division of Land Pollution Control

Bureau of Land

GDS:TJM:sjd

cc: USEPA Region V, George Hamper USEPA Region V, Kelley Moore USEPA Region V, Jane Ratcliffe

Randall L. Patchett



217/524-3300

July 14, 1992

Southern Illinois University at Edwardsville

Attn: David E. McDonald

Hazardous Waste Management Department

Box 1657

Edwardsville, Illinois 62026

Re: 1190255002 -- Madison County

Southern Illinois University-Edwardsville

ILD006331342 Log No. C-619

Received: June 1, 1992

RCRA Closure

Dear Mr. McDonald:

The information that was requested in the Agency closure plan approval letter dated April 20, 1992 for the above referenced facility has been reviewed by this Agency.

The submittal meets the requirements of Conditions number 1, 2, 4 and 16 of the closure plan approval letter.

Should you have any questions regarding this matter, please contact John Riekstins at 217/524-3300.

Very truly yours,

Lawrence W. Eastep, P.E., Manager

Permit Section

Division of Land Pollution Control

Bureau of Land

LWE:JR

cc: USEPA Region V -- George Hamper

USEPA -- Gerald R. Golubski Central District Office



Illinois Environmental Protection Agency P.O. Box 19276, Springfield, IL 62794-9276

217/782-6762

April 20, 1992

Southern Illinois University at Edwardsville

Attn: Dr. Antony Wilbraham

Science Building Campus Box 1652

Edwardsville, Illinois 62026

Re: 1190255002 -- Madison County

Southern Illinois University-Edwardsville

ILD006331342 Log No. C-619

Received: January 21, 1992

RCRA-Closure

Dear Dr. Wilbraham:

The closure plan that was submitted and prepared by Hurst-Rosche Engineers, Inc. has been reviewed by this Agency. Your final closure plan to close the hazardous waste container storage area (SOI) and treatment area (TO4) at the above referenced facility is hereby approved subject to the following conditions and modifications.

- 1. The typical characteristics of the waste streams at SIU-E shown in Attachment 2 of the closure plan need further explanation. The chemical composition of each waste stream, the hazard characteristics, the basis for hazard designation and a laboratory report detailing the chemical and physical analyses of representative samples must be submitted to the Agency for review by June 1, 1992. Based upon this information, the list of parameters identified in Table 1 of the approved closure plan may need to be modified to include all constituents for the wastes handled at the facility.
- 2. A detailed description and scaled drawings/sketches of the fume hoods used in the (TO4) treatment area must also be provided. This information must be submitted to the Agency by June 1, 1992.
- Before discharging "clean" rinsate to the sanitary sewer system, necessary permits/permission from the Agency's Bureau of Water and the local sanitary district must be obtained. Should you have any questions concerning this matter, please contact Water Permits at 217/782-1696.
- 4. A detailed scaled drawing of the concrete containment curb in the container storage (SOI) area must be provided by June 1, 1992.
- 5. Closure activities must be completed by November 1, 1992. When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure, or by January 1, 1993.



The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the units approved for closure herein until the Agency approves the facility's closure certification.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste and waste residue removed. The term waste includes wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. The waste manifest numbers.
- d. Copies of the waste manifests.
- e. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
- f. A chronological summary of closure activities and the cost involved.
- g. Color photo documentation of closure. Document conditions before, during and after closure.
- h. Tests performed, methods and results.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:



Illinois Environmental Protection Agency Division of Land Pollution Control -- #24 Permit Section 2200 Churchill Road Post Office Box 19276 Springfield, Illinois 62794-9276

- 6. Along with your certification of closure, please submit a letter requesting withdrawal of your facility's Part A application.
- 7. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 8. If contamination is detected, the Agency must be notified in writing within fifteen (15) days. A revised closure plan addressing remediation of the contamination detected must be submitted within timeframes established by the Agency.
- 9. A request for release of financial assurance documents should be included with the closure certification documents.
- 10. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
- 11. The surfaces of the concrete floor in the container storage (SO1) area; the tiled floor, the epoxy coated laboratory bench tops and the interiors of the fume hoods in the treatment (TO4) area shall be visually inspected, photographed and any residue adhering to the surface must be removed by scraping and/or brushing. Following this, the previously mentioned surfaces must be steam cleaned and triple rinsed. All wash and rinse water shall be collected. If analysis of the wash or rinse water samples detect the presence of any constituents above the constituent's POL identified in SW-846 (Third Edition), then that material must be managed as a hazardous waste. If the wash or rinse water samples exhibit a characteristic of hazardous waste then that material must be managed as a hazardous waste. In any event the material must be managed as a special waste. After cleaning the concrete surfaces, an independent registered professional engineer shall inspect the integrity of the concrete surfaces. These surfaces shall be inspected for cracks which penetrate through the concrete. In addition, all construction joints must



be inspected to ensure they are watertight. The results of this inspection shall be (1) submitted in the form of a report, (2) submitted to the Agency by June 1, 1992, and (3) certified in accordance with 35 Ill. Adm. Code 702.126 by the engineer. The report must include (1) the results of the inspection, (2) conclusions reached regarding any cracks or construction joints observed in the areas of concern, (3) justification for the conclusions reached (e.g., information must be provided which indicates that any construction joints in the areas of concern are indeed watertight), and (4) photographs to support the conclusions reached. If joints or other defects are found which would allow waste to migrate through the concrete surfaces to the surrounding and/or underlying soil, then a closure plan modification request addressing soil sampling at those locations must be submitted to this Agency by June 1, 1992. Such proposed soil sampling must be in accordance with the quidance set forth in the Agency's RCRA interim status closure plan instructions.

- 12. All samples shall be analyzed individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes, Third Edition (SW-846) and Attachment 7 to this Agency's closure plan instruction package. When a SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the third edition of SW-846. For inorganic parameters, the detection limit must be at least as low as the RCRA Groundwater Detection Limits, as referenced in SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15. If possible, your sampling program should be extensive enough to determine the lateral and vertical extent of contamination to the detection limit (POLs) referenced above.
- 13. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.



- 14. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).
- 15. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Agency by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment and/or disposal during any calendar year. Additional information and appropriate report forms may be obtained from the Agency by contacting:

Facility Reporting Unit
Division of Land Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

16. All facilities "seeking a permit/RCRA closure" must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the Unit. Please note that both hazardous and non-hazardous wastes can meet the definition of solid waste under 35 IAC Section 721.102.

Consequently, the IEPA must determine whether such releases have ever occurred at the facility site. If they have, the IEPA must ensure that any necessary corrective actions either have been taken, or will be taken, pursuant to a decision on your closure plan. An important part of this Agency's determination includes your willingness (or unwillingness) to complete the enclosed certification form (Attachment 2). Please read it carefully, complete it, and either sign and return it, or return it to us unsigned with a cover letter of explanation by June 1, 1992.

Should you have any questions regarding this matter, please contact John Riekstins at 217/782-6762.

Very truly yours,

Lawrence W. Eastep, P.E., Manager

Permit Section

Division of Land Pollution Control

Bureau of Land

LWE:JR:dks/1102r, 96-100

Attachment

cc: USEPA Region V -- George Hamper

USEPA -- Gerald R. Golubski Central District Office (5 SCDO)



ATTACHMENT

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-619

The hazardous waste container storage (SOI) and treatment (TO4) units at the facility described in this document have been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number	Facility Name	
Signature of Owner/Operator	Name and Title	
Signature of Registered P.E.	Name of Registered P.E. and Illinois Registration Number	
Date JR:dks/1102r 101		